

REMARKS/ARGUMENTS

Upon entry of the present amendment, Claims 1, 7-11, 17-19 and 21-27 are pending and presented for examination. Claims 1 and 7-20 stand rejected by the Patent Office. Claims 1, 7, 17 and 19 are currently amended, Claims 2-6, 12-16 and 20 are canceled without prejudice and disclaimer and Claims 21-27 are new. Claims 8-11 and 18 are unchanged from the original presentation. Applicants reserve the right to pursue canceled subject matter in divisional and/or continuation applications.

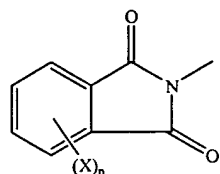
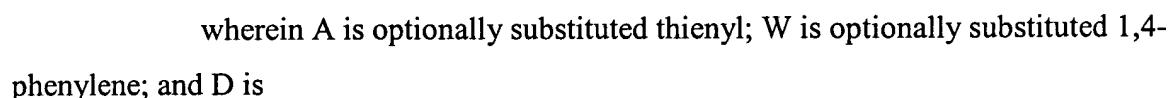
The amendments to the claims find support in the application as originally filed. In particular, claim 1 has been amended to limit the claim to the group searched by the Patent Office and to address alleged indefiniteness issues as noted below. Dependent Claim 7 has been amended to maintain claim differentiation by eliminating the phrase "for preventing or treating thrombosis". Claim 17 has been amended to maintain proper claim dependency. Claim 19 has been amended to incorporate all the limitations of former Claim 20. New Claims 21, 22, 26 and 27 find support in Claims 3, 4 and 6 as originally filed. Finally, support for Claims 23-25 is found, *inter alia*, on page 19, Example 8, as originally filed. Applicants believe no new matter is present in any portion of the amendment.

For the Patent Office's convenience, Applicants' remarks are presented in the order in which the corresponding issues were raised in the Office Action. Reconsideration of the application is requested in view of the amendments to the claim set and the following remarks.

Rejection of Claims 1 and 7-20 for Containing an Improper Markush Grouping

Claims 1 and 7-20 stand rejected as allegedly being indefinite for containing an improper Markush grouping. The Patent Office urges that the members of a proper Markush grouping must share a substantial structural feature disclosed as being essential to the utility (citing MPEP 803.02).

In an effort to expedite prosecution, Applicants have amended claim 1 to include the searched and unobjected to formulas I and II:



E is selected from the group consisting of H, -C₁-C₈ alkyl, polyhaloalkyl, -C₃₋₈-cycloalkyl, optionally substituted aryl, alkylaryl; Y is selected from the group consisting of O, S, N-OR⁵, and NR⁵, and R⁵ is selected from the group consisting of: H, C₁₋₁₀ alkyl, C₃₋₈-cycloalkyl, and CN;

Rejections under 35 U.S.C. § 112, 2nd paragraph

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the term "prodrug" is indefinite because one cannot determine exactly the structure of the prodrug. The Patent Office also alleges that use of the term "cardiovascular disease" is indefinite because it covers a variety of diseases that are unrelated and/or opposites. Finally the Patent Office alleges certain improper claim dependencies. Applicants respond in part by traverse and in part by amendment.

In response to the Patent Office's first allegation, Applicants have removed the terms "heteroaryl" from the pending claim set. The term "heterocyclic" as recited in independent claim 1 is defined in that claim as a ring system "having 1 to 4 heteroatoms independently selected from N, O, and S, with the proviso that the carbon and nitrogen atoms, when present in the heterocyclic ring system, are unsubstituted, mono- or di-substituted independently with 0-2 W groups." The Applicants note that the number and type of atoms are clearly specified in the claims in contrast with the Patent Office's allegation. In addition, the terms "heterocyclic ring" and "heterocyclic ring system" are also defined on page 8, lines 15 to 24 as including mono-, bi-, and tri-cyclic systems. Thus the number and type of rings is also well defined. As such Applicants believe the meaning of the term "heterocyclic" is clear and definite within claim 1 and in the dependent claims. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Further, the term "substituted" is recited in the independent claim 1 and defined in the specification on page 9, lines 2-5 as meaning that "one or more of the hydrogen atoms on the ring carbon atom(s) or nitrogen atom(s) of the [sic] each of the rings in the ring structures described herein may be replaced by one or more of the indicated substituents if such replacement(s) would result in a stable compound." In response to the Patent Office's allegation, Applicants have amended claim 1 to recite the types of substituents as indicated in the specification. Specifically, on page 7, line 33 to page 8, line 3 these substituents are defined as as:

"...one, two or three substituents independently selected from the group consisting of lower alkoxy, lower alkyl, loweralkylamino, hydroxy, halogen, cyano, hydroxyl, mercapto, nitro, thioalkoxy, carboxaldehyde, carboxyl, carboalkoxy and carboxamide..."

The above excerpt clearly states the types of substituents that are permitted where they are not otherwise explicit in the claims. As such Applicants believe the meaning of the term "substituted" is clear and definite within claim 1 and in the dependent claims. Accordingly, Applicants respectfully request that this rejection be withdrawn.

In response to the Patent Office's third allegation, Applicants have removed the term "prodrugs" from the pending claim set. With the removal of the word "prodrugs" from the last line of claim 1, Applicants believe the Patent Office's rejection is now moot.

In response to the Patent Office's fourth allegation, Applicants have amended the term "cardiovascular disease" to recite the indications listed in original claim 20. Accordingly, Applicants believe the Patent Office's rejection is also moot.

Finally, the Applicants have amended claims 12 and 17 to depend from claim 1. In view of the above amendments to the claims, Applicants believe the Patent Office's concerns have been addressed and respectfully request that the rejection of claims 1 and 7-20 be withdrawn.

Rejections under 37 CFR 1.75


Claims 8-11 are rejected under 37 CFR 1.75 as allegedly being duplicate claims. In response, claim 7 has been amended to recite "a pharmaceutical composition comprising a therapeutically effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier". As such, Applicants submit that the rejection of claims 8-11 is now moot and should be withdrawn.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance.

If the Patent Office believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 925-472-5014.

Respectfully submitted,



Mark H. Hopkins, Ph.D.
Reg. No. 44,775

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 925-472-5000 / Fax: 415-576-0300
MHH
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